

AF 323



Attorney Docket No. FUJ 99228 CIP  
Client Matter. No. 80458.0004.001

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Katsuyoshi MATSUURA, et al.

Serial No. 09/551,233

Filed: April 17, 2000

Title: SEMICONDUCTOR DEVICE HAVING A  
FERROELECTRIC CAPACITOR AND A  
FABRICATION PROCESS THEREOF

Examiner: H.-M. LEE

Art Unit: 2823

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Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

The undersigned hereby certifies that the attached

1. Amendment & Response to Final Office Action;
2. Return Card, and

this Certificate of Mailing by Express Mail relating to the above application, were deposited as "Express Mail," Mailing Label No. EL936770994US with the U.S. Postal Service, addressed to Attention: Box: AF, Assistant Commissioner for Patents, Washington, D.C. 20231, on May 3, 2002.

May 3, 2002

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May 3, 2002

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H. M. Lee  
5/9/02

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AMENDMENT & RESPONSE TO FINAL OFFICE ACTION

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

In response to the final Office Action mailed February 6, 2002 for which a shortened statutory period for response was set to May 6, 2002, please amend the above-identified application as follows:

**IN THE CLAIMS:**

**Please amend claims 1, 15, and 21 as follows (clean copy attached):**

1. (Thrice Amended) A method of fabricating a semiconductor device having a ferroelectric capacitor, comprising the steps of:
  - forming an active device element on a substrate;
  - forming an insulation film over said substrate to cover said active device element;
  - forming a lower electrode layer of said ferroelectric capacitor over said insulation film;
  - forming [a] an amorphous PZT ferroelectric film on said lower electrode layer as a capacitor insulation film of said ferroelectric capacitor;
  - crystallizing said amorphous PZT ferroelectric film by applying a thermal annealing process in an atmosphere containing a non-oxidizing gas and an oxidizing gas; and